



**Review of Dominion Energy South Carolina,
Incorporated's 2022 Annual Update on
Demand Side Management Programs and
Petition for an Update to Rate Rider**

Docket No. 2022-52-E

South Carolina
Office of Regulatory Staff

April 1, 2022

Executive Summary

On January 31, 2022, Dominion Energy South Carolina, Inc. (“DESC” or the “Company”), formerly known as South Carolina Electric & Gas Company, filed its Annual Update on Demand Side Management (“DSM”) Programs and Petition to Update Rate Rider. On March 10, 2022, the Company filed an Amended Annual Update on DSM Programs and Petition to Update Rate Rider, incorporating several modifications to the original filing – primarily the removal of employee incentives that were previously included in the requested cost recovery. The Company is requesting recovery in the amount of \$59,918,731 in this filing.

DESC’s amortized program costs with carrying costs constitute \$39,292,451, or 66%, of the total requested amount. Net Lost Revenues (“NLR”) constitute \$17,947,625, or 30%, of the total requested amount, and \$2,678,655, or 4%, of the total requested amount represents the amortized portion of the Company’s Shared Savings Incentive (“SSI”).

The COVID-19 pandemic had significant impacts on the Company’s DSM programs – causing delays in implementation and temporary suspensions of certain programs. However, as of the date of this filing, the Company has resumed the normal implementation of the DSM programs.

Table 1 below compares the existing DSM rates to those currently requested by DESC:

Table 1: Previous and Requested DSM Rider

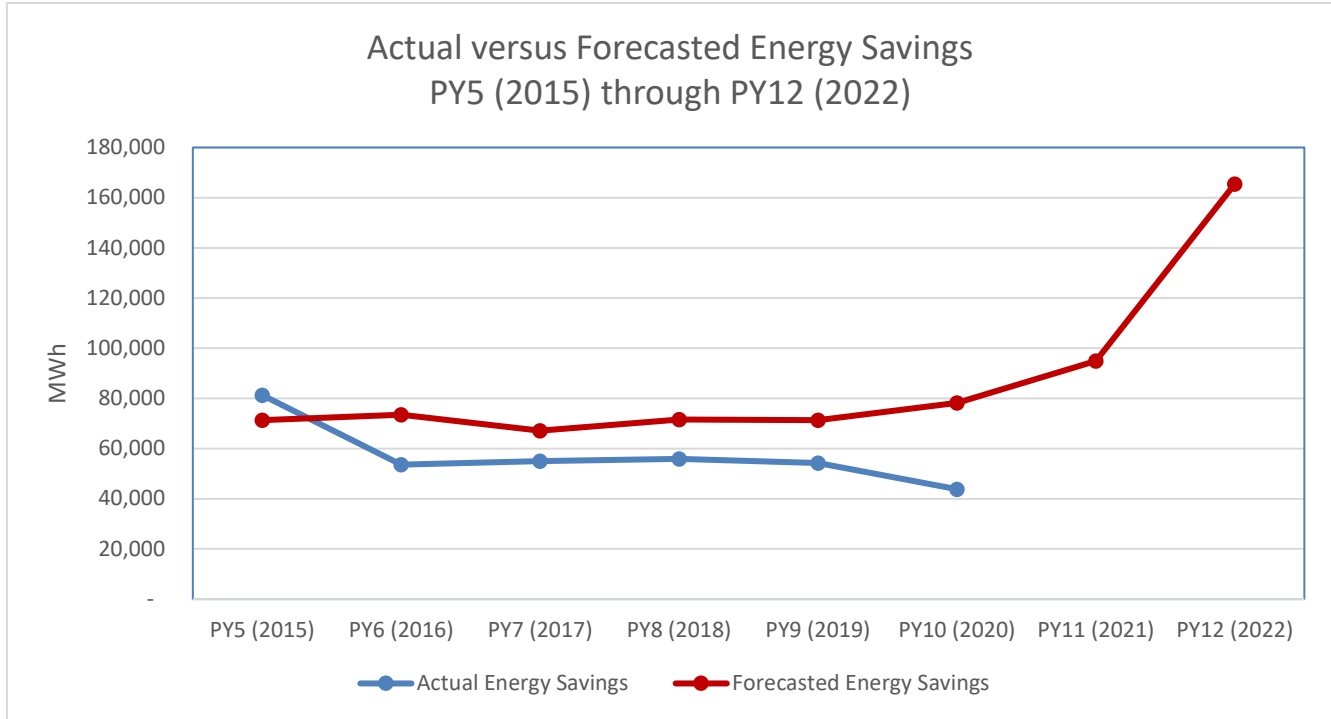
DSM Rider Class	Approved 2021 Rate (¢/kWh)	Requested 2022 Rate (¢/kWh)
Residential	0.221	0.307
Small General Service	0.433	0.620
Medium General Service	0.277	0.324
Large General Service	0.127	0.145

The Company’s requested rate change would increase the bill of an average residential customer using 1,000 kilowatt hours (“kWh”) per month by approximately \$0.86. According to the Company, the primary factor driving the increases in the DSM Rate Riders is the “vintaging of program costs.”

The South Carolina Office of Regulatory Staff (“ORS”) has two (2) concerns. In recent years, the Company’s actual energy savings have consistently been well below the forecasted savings.

The following chart illustrates the shortfalls through 2020 and the Company's projected energy savings for 2021 and 2022:

Chart 1: Actual versus Forecasted Energy Savings PY5 through PY12



Given the actual energy savings achieved to date, the Company's forecasted energy savings do not appear reasonable. Should this pattern of energy savings shortfalls continue, there will be a large shortfall in energy savings in 2021 and 2022. ORS recommends the Company make modifications to ensure future energy savings can more closely match forecasts. The Public Service Commission of South Carolina ("Commission"), in Order No. 2021-295, required the Company to revisit the methodology employed to generate the projected Programs' savings to ensure better alignment with the Company's future actual realized savings. The Company reported it has started to address the issue of the disparity between its actual and projected Programs' savings.

In addition, the Home Energy Check-Up Program has failed to be cost effective in Program Year ("PY") 8, 9, and 10 and is projected to fail the cost-effectiveness test for PY11, also. ORS recommends the Company make the necessary modifications to this program to ensure cost-

effectiveness in future filings. The Company reported starting additional activities to address the decline in cost-effectiveness of the program.

Introduction

South Carolina Electric & Gas Company ("SCE&G"), now known as DESC,¹ filed a Request for Approval of its DSM² Plan including a DSM Rate Rider and Portfolio of Energy Efficiency Programs with the Commission in Docket No. 2009-261-E on June 30, 2009. SCE&G proposed nine (9) DSM programs – seven (7) targeting residential customers and two (2) for commercial and industrial customers. Two (2) settlement agreements – the General Settlement Agreement and the Opt-Out Settlement Agreement – were approved by the Commission in Order No. 2010-472 dated July 15, 2010.

On May 31, 2013, SCE&G filed an Application for Approval to Continue Demand Side Management Programs (Docket No. 2013-208-E) with no change to the DSM Rate Rider and with a revised portfolio of DSM programs. A Settlement Agreement was reached by SCE&G, ORS, the South Carolina Energy Users Committee, and Wal-Mart Stores, East and Sam's East, Inc. On November 26, 2013, the Commission approved the Settlement Agreement and ordered the following:

- SCE&G's revised portfolio of DSM programs should be approved as filed;
- SCE&G should retain the authority and flexibility to modify, amend, terminate and/or add any measure or program without seeking prior Commission approval;
- SCE&G should continue to file annual reviews of the programs and program costs with the Commission and ORS;
- SCE&G should review additional programs designed specifically for low-income participants;
- the NLR recovery should be limited to a rolling three (3) year period; and
- the amortization period for the recovery of Program Costs and SSI should be five (5) years.

¹ Dominion Energy, Inc. changed the name of SCE&G to DESC effective April 29, 2019.

² DESC refers to the programs as DSM programs, and ORS does the same, even though the programs are better described as energy efficiency programs.

The Settlement Agreement also provided the option for certain non-residential customers having annual energy consumption of 1,000,000 kWh or more to opt-out of the DSM programs and required that non-residential customers who accepted a DSM rebate from SCE&G remain in the programs for five (5) years from the date of acceptance. Finally, the Settlement Agreement provided that any party could request a review and submit proposed changes to both the mechanism and the portfolio of programs after six (6) years. The Settlement Agreement was approved by the Commission in Order No. 2013-826.

On January 31, 2014, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2014-44-E. After reviewing SCE&G's filing in this case, ORS made several recommendations that were subsequently approved by the Commission. Those recommendations included:

- Eliminating the Residential Energy Information Display Program and Home Performance with ENERGY STAR Program due to the programs' lack of cost-effectiveness;
- Reducing the recovery of projected NLR by 25% to mitigate costs to ratepayers stemming from participation estimates; and
- Modifying the Residential ENERGY STAR Lighting Program to ensure that incentives are available to DESC customers only, and to reflect changes occurring due to federal standards that are removing certain bulbs from the marketplace.

On January 30, 2015, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2015-45-E. Concerning this case, ORS made the following recommendations that were subsequently approved by the Commission in Order No. 2015-307:

- Limiting the collection of NLR for the Home Energy Report Program to the time the customer is enrolled in the program;
- Eliminating the rebate offered for air conditioners with an energy efficiency rating of 14 SEER or below under the Heating & Cooling and Water Heating Equipment Program;

- Encouraging SCE&G to explore cost-effective methods to increase its energy efficiency efforts and to use the Advisory Group as a resource for program growth and design and to reduce administrative costs associated with the DSM programs; and
- SCE&G undertaking an investigation to address the causes of the large number of opt-outs from the DSM programs by large commercial and industrial customers.

On January 29, 2016, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2016-40-E. ORS recommended that SCE&G update the avoided costs used to compute the benefits and overall cost-effectiveness of the programs. ORS and SCE&G indicated they would continue to monitor cost-effectiveness of programs to determine if future modifications were necessary.

On January 31, 2017, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2017-35-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 30, 2018, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2018-42-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 31, 2019, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2019-57-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On June 28, 2019, DESC filed its Request for Approval of an Expanded Portfolio of DSM Programs and a Modified DSM Rate Rider in Docket No. 2019-239-E. A public hearing was held on November 13, 2019, involving the Company, ORS, Walmart, Inc., the South Carolina State Conference of the National Association for the Advancement of Colored People, the South Carolina Coastal Conservation League, and the Southern Alliance for Clean Energy. The Commission approved, via Order No. 2019-880, the Company's expanded portfolio of DSM programs and approved (with modifications) the Company's requested changes to the DSM

Rate Rider. The major changes to the Company's DSM programs and cost recovery mechanism resulting from Docket No. 2019-239-E were as follows:

- Two (2) new programs were added to the Company's DSM portfolio – the Residential Multifamily Program and the Municipal LED Lighting Program;
- The Company's SSI was increased from 6% of net benefits to 9.9% of net benefits;
- Program costs amortized over three (3) years rather than five (5) years (SSI continues to be amortized over five years); and
- The Company was to reevaluate the proposed DSM portfolio under the avoided costs and avoided cost methodology approved in Docket No. 2019-184-E.

On January 31, 2020, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2020-41-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 29, 2021, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2021-34-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 31, 2022, the Company filed its Annual Update on DSM Programs and Petition to Update Rate Rider in Docket No. 2022-52-E. On March 10, 2022, the Company filed an Amended Annual Update on DSM Programs and Petition to Update Rate Rider, incorporating several modifications to the original filing – primarily the removal of employee incentives that were previously included in the requested cost recovery. ORS, in accordance with the annual review process established in Docket No. 2013-208-E which was continued in Order No. 2019-880, conducted a review of DESC's filing. ORS's review includes an evaluation of the three (3) major cost components associated with the Company's DSM programs—Program Costs, NLR, and SSI.

Table 2 below illustrates each PY since the inception of the programs:

Table 2: Program Year Timeline

Program Year	Beginning Date	Ending Date	
1	October 1, 2010	November 30, 2011	
2	December 1, 2011	November 30, 2012	
3	December 1, 2012	November 30, 2013	
4	December 1, 2013	November 30, 2014	
5	December 1, 2014	November 30, 2015	
6	December 1, 2015	November 30, 2016	
7	December 1, 2016	November 30, 2017	
8	December 1, 2017	November 30, 2018	
9	December 1, 2018	November 30, 2019	
10	December 1, 2019	November 30, 2020	
11	December 1, 2020	November 30, 2021	"Review Period"
12	December 1, 2021	November 30, 2022	"Forecast Period"

The Company's actual costs were audited for the period December 1, 2020, through November 30, 2021 ("Review Period" or "PY11"). ORS also reviewed the Company's cost projections for the period December 1, 2021 through November 30, 2022 ("Forecast Period" or "PY12").

Table 3 below shows the actual DSM Program Energy Savings, Program Expenses and Administrative Costs for PY1 through PY11.

Table 3: DSM Program Energy Savings, Program Expenses, and Administrative Costs

Program Year	MWh Savings	Program Expenses	Administrative Costs
PY1	57,332	\$11,446,748	\$597,187
PY2	110,623	\$16,063,043	\$1,071,356
PY3	105,378	\$19,536,326	\$1,080,699
PY4	96,392	\$16,758,638	\$708,051
PY5	81,293	\$12,680,376	\$551,316
PY6	53,613	\$10,265,667	\$623,653
PY7	55,046	\$12,741,575	\$712,343
PY8	55,843	\$13,585,912	\$1,207,985
PY9	54,252	\$15,254,547	\$1,378,548
PY10	43,797	\$14,207,713	\$1,057,534
PY11 ³	94,869	\$20,528,634	\$1,279,971

³ This value is forecasted rather than actual.

Chart 2 below illustrates the fluctuation of the DSM Program energy savings and the associated Program Expenses for PY1 through PY11.

Chart 2: DSM Program Savings and Program Expense for PY1 through PY11

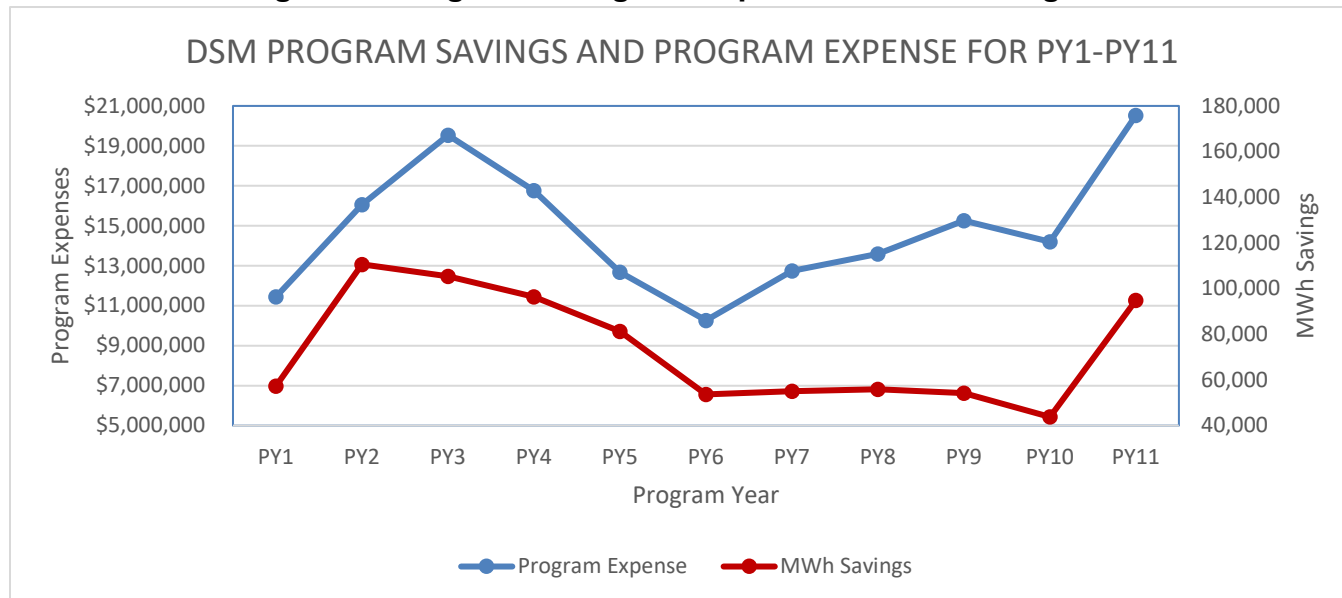
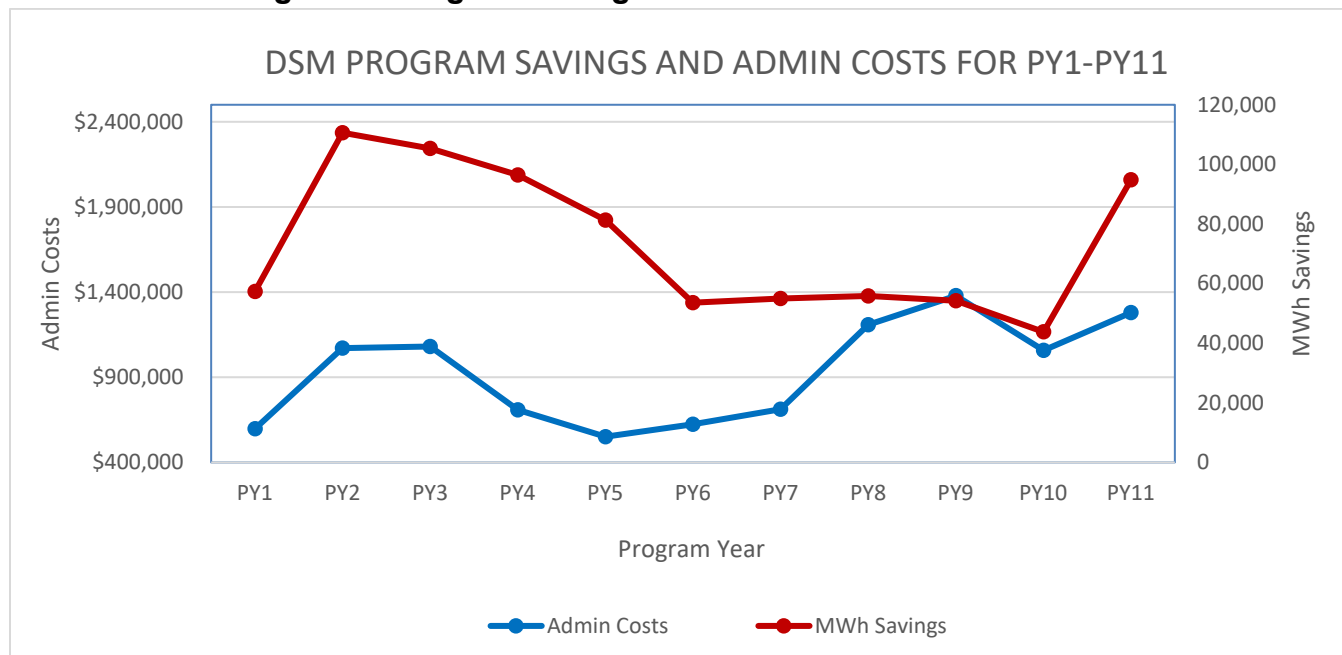


Chart 3 below illustrates the fluctuation of the DSM Program energy Savings and the associated Administrative Costs for PY1-PY11.

Chart 3: DSM Program Savings and Program Administrative Costs for PY1-PY11



DSM Programs

The Company currently offers ten (10) DSM programs. The programs and the launch dates of each program are shown below in Table 4 below:

Table 4: DSM Programs and Launch Dates

<u>Residential Programs</u>		
i.	Home Energy Check-Up	10/01/2010
ii.	ENERGY STAR Lighting	02/14/2011
iii.	Heating & Cooling	03/01/2011
iv.	Home Energy Reports	04/06/2011
v.	Neighborhood Energy Efficiency Program (“NEEP”)	07/30/2013
vi.	Appliance Recycling	10/30/2014
vii.	Multifamily	07/1/2020
<u>Commercial and Industrial Programs</u>		
viii.	EnergyWise for Your Business	10/01/2010
ix.	Small Business Energy Solutions	11/24/2014
x.	Municipal LED Lighting	04/01/2020

During PY11, the Company made the following major changes to its program offerings:

- The Home Energy Reports Program finalized the transition from an opt-in program to an opt-out program, in which participants with the ability to opt-out are pre-selected by the Company;
- Tier 2 of the Home Energy Checkup program was launched in April 2021 after being limited by the COVID-19 pandemic. However, the Company developed a virtual Home Energy Check-up to allow participation without in-person visits;
- In response to the COVID-19 pandemic, the Company developed an Energy Efficiency kit for the NEEP program that could be delivered without entering homes. A total of 4,197 kits were distributed to customers who did not receive the full in-person NEEP service;

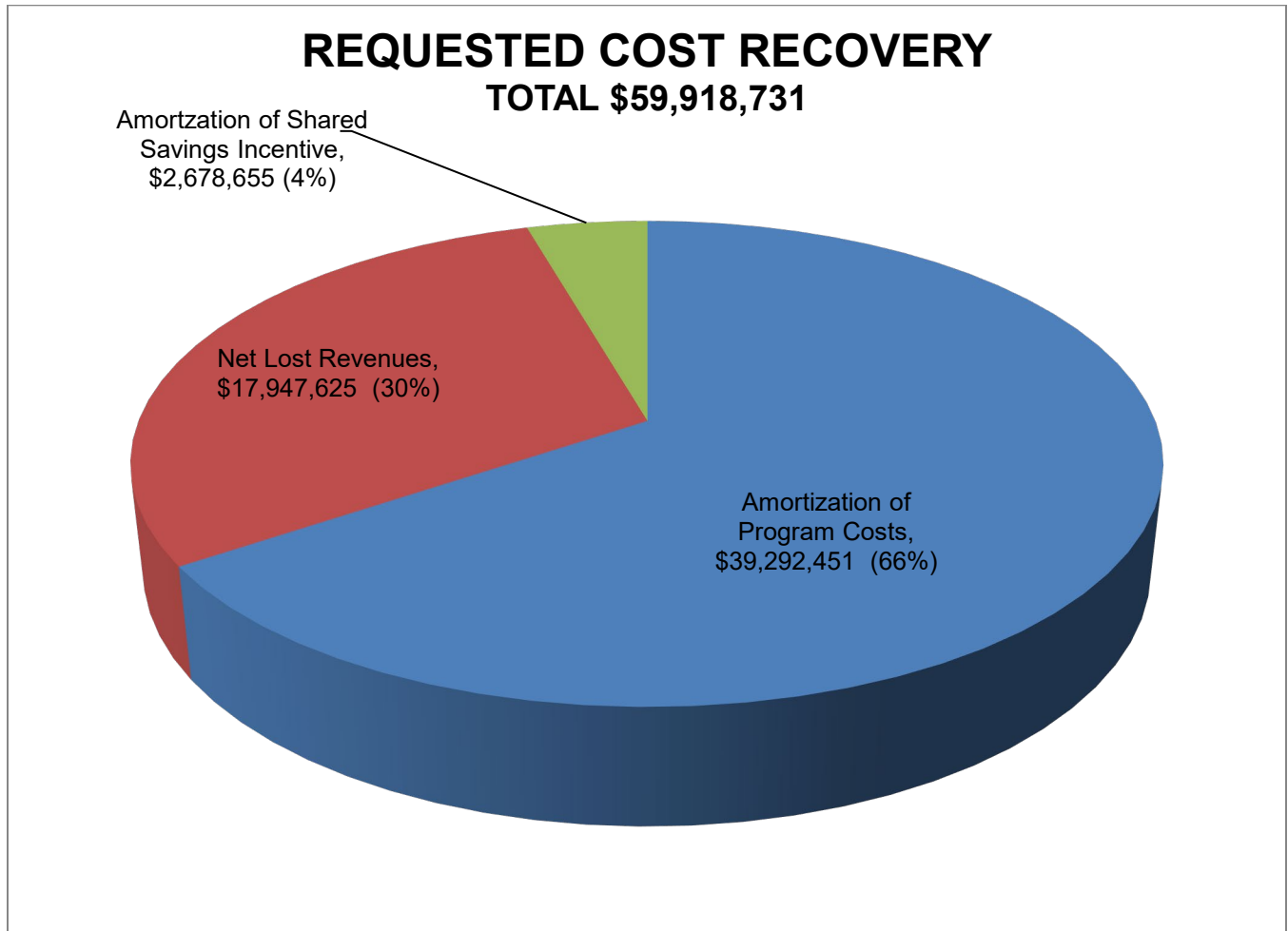
- In the Appliance Recycling program, the Company continued its no-contact option to allow the continuation of pickups and implemented a strategic marketing plan;
- The Heating and Cooling program added rebates for customers willing to replace old electric water heaters and old electric furnaces;
- The Multifamily program solicited approximately twenty (20) properties in Columbia and Charleston for participation in the program. Additional measures were also added;
- The Company continues to work with municipalities to encourage participation in the Municipal LED Lighting program. During PY11, thirty-nine (39) contracts were signed, and sixteen (16) projects were completed;
- Three (3) new components were added to the EnergyWise for Your Business program and the program incentive cap was increased; and
- HVAC audits and related measures were added to the Small Business Energy Solutions program.

DSM Cost Evaluation

The Company seeks to recover a total cost of \$59,918,731 in this filing. For the programs currently in place, the Company estimates that average lifetime costs will be 2.47 ¢/kWh saved.

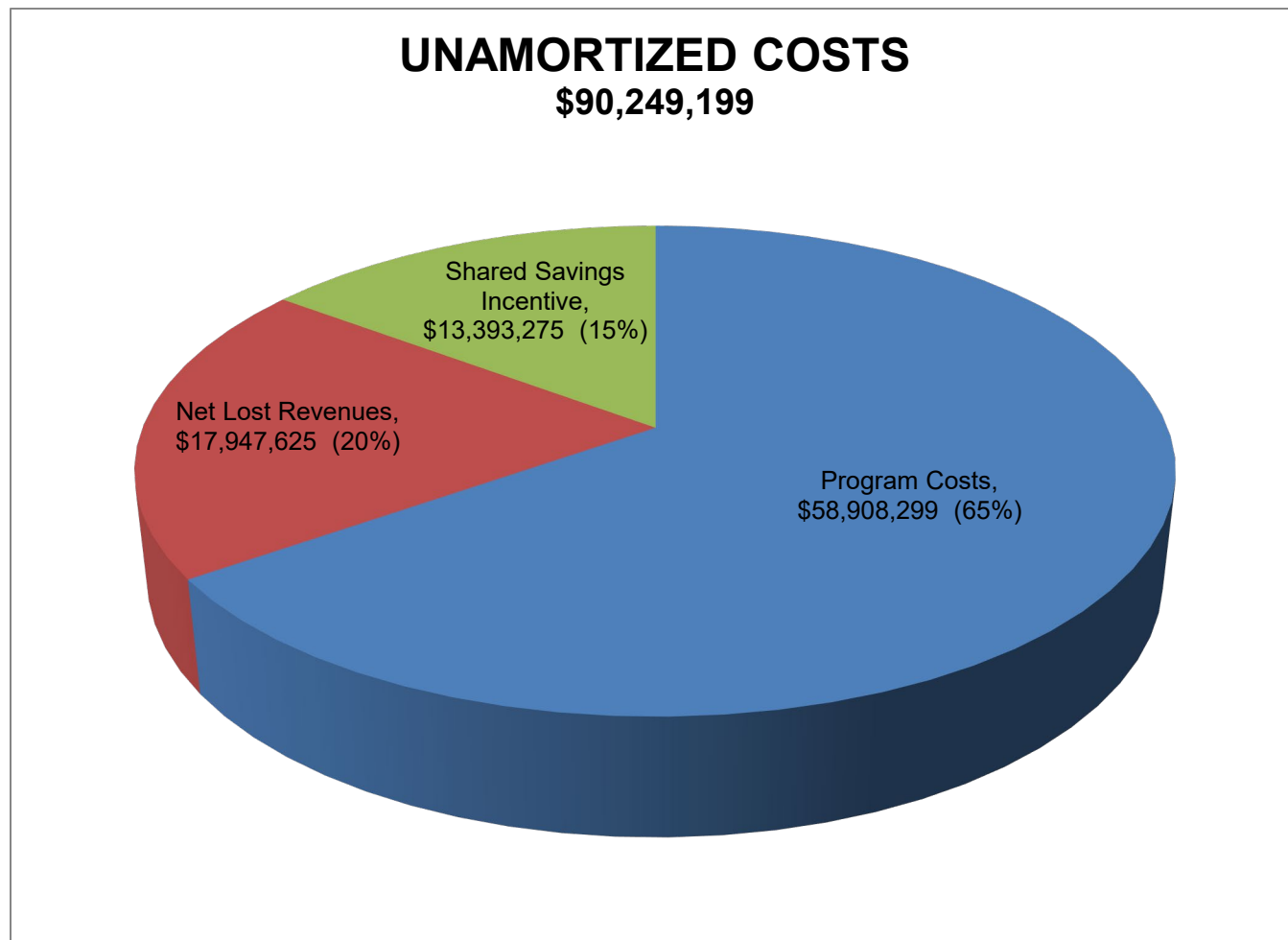
DESC's amortized Program Costs with carrying costs results in a request of \$39,292,451, or 66% of the total requested amount. The Company is requesting \$17,947,625 for NLR, or 30% of the total requested amount. DESC does not amortize its NLR and recoups the total amount during the Recovery Period. Finally, DESC is requesting \$2,678,655, or 4% of the total requested amount, as SSI is to be amortized over five (5) years without carrying costs.

Chart 3: Requested Cost Recovery



The total unamortized cost for DESC's programs to date is \$90,249,199. This amount includes the Program Costs balance of \$58,908,299 (65% of the total unamortized cost); NLR of \$17,947,625 (20% of the total unamortized cost); and SSI balance of \$13,393,275 (15% of the total unamortized cost). The following chart illustrates the proportions of the unamortized costs attributable to the various components.

Chart 4: Unamortized Costs



A breakdown of the major cost components in this filing and the development of the billing factors are shown in Exhibit 1. The requested revenues from residential customers are recovered from all residential ratepayers, while the non-residential revenues are recovered from non-residential ratepayers that have not opted out of the programs.

Advisory Group

The DESC DSM Advisory Group (“Advisory Group”)⁴ continues to meet to discuss the status of each program, including preliminary participation statistics, Evaluation, Measurement & Verification (“EM&V”) plans, and preliminary EM&V data. The Advisory Group met five times during PY11.⁵ During the meetings, DESC provided updates on the status of the new DSM Market Potential Study, the impacts of the COVID-19 pandemic on the programs, EM&V results for PY10, and issues concerning low-income participants.

Evaluation, Measurement & Verification

In May 2021, the Company filed its EM&V Report for PY10. The EM&V Report is the basis for the latest true-ups of NLR and the SSI included in the filing. To date, the Company utilized EM&V results to true-up NLR and the SSI for PY1-PY10. The EM&V Report for PY11 is expected to be available in May 2022, providing data for true-ups of PY11 in the January 2023 filing.

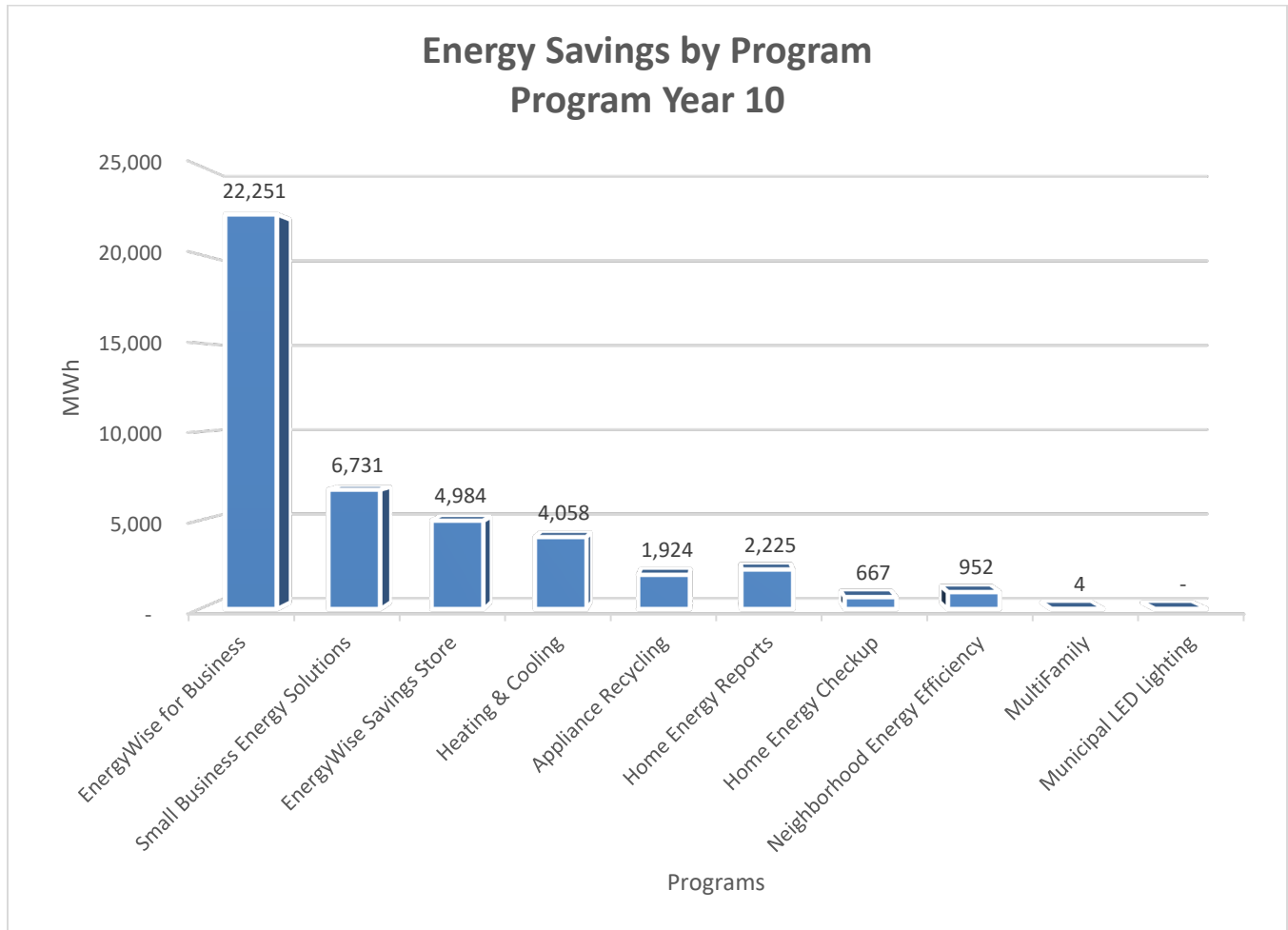
According to the PY10 EM&V Report, the Company spent 64% of projected Program Costs and achieved 43,797 megawatt hours (“MWh”), or 56% of projected energy savings in PY10. Only one of the Company’s ten (10) programs active in PY10 met their energy saving forecast in PY10, and the EnergyWise for Your Business program provided the majority of savings - 51% of the total energy savings.

⁴ The Advisory Group was formed in accordance with Order No. 2010-472 and includes one representative each from the industrial sector, commercial sector, environmental sector, State Low Income Home Energy Assistance Program (LIHEAP) and ORS.

⁵ The Advisory Group meetings in PY11 occurred on the following dates: January 19, 2021, April 27, 2021, August 17, 2021, October 26, 2021, and November 17, 2021.

Chart 6 below illustrates the relative energy savings by program for PY10.

Chart 6: PY10 Energy Savings by Program



Estimates Used in the Filing

For PY11 and PY12, all program avoided energy amounts, avoided capacity amounts, NLR, and SSI are projections that were developed using the ICF International (“ICF”) DSM Planning Model. Thus, all the dollar amounts in the filing, with the exception of the program costs in the Review Period and trued-up amounts in PY10, are estimates. These values and dollar amounts will be trued-up in future filings based on EM&V results. ORS reviewed the data and assumptions used in the ICF DSM Planning Model and tested certain changes in the data and assumptions. ORS finds the ICF DSM Planning Model to have produced reasonable estimates for the DESC DSM programs.

Forecasted Retail Sales

The Company utilized its most recent short-term sales forecast to compute the DSM Rate Rider in this filing. This forecast is the same forecast DESC used during its 2022 Annual Fuel filing. As such, ORS is familiar with the methodology used to generate the sales forecast and finds it to be a reasonable approach to establish rates.

Energy and Peak Demand Savings

The Company projects that during the Forecast Period (PY12) the DSM programs will reduce annual electric usage by 165,511 MWh. These are noteworthy savings and, if achieved, may provide DESC the ability to avoid or defer outright power purchases or the construction of a portion of required new generating facilities.

Opt-Outs

The Opt-Out Settlement Agreement allows all industrial customers to opt-out of the DSM programs (and not pay the DSM Rate Rider) by notifying the Company in writing that the customer does not wish to participate in the Company's programs and has, or will, implement alternative DSM programs at its own expense. Beginning with PY4, large commercial customers may opt-out of the DSM programs in accordance with the terms of the Settlement Agreement approved in Commission Order No. 2013-826. At the end of PY11, 378 large commercial and industrial accounts had opted-out of DESC's DSM programs, representing 22% of the Company's retail electric load. This represents an improvement over PY10, in which 407 large industrial and commercial accounts had opted out, representing 22% of the Company's retail electric load.

DSM Rate Rider

Table 5 below compares previous and existing DSM rates to those currently requested by DESC:

Table 5: Previous Approved and Requested DSM Rates

DSM Rider Class	Approved 2020 Rate (¢/kWh)	Approved 2021 Rate (¢/kWh)	Requested 2022 Rate (¢/kWh)	Percentage Change in 2022 over 2021 Rate
Residential	0.220	0.221	0.307	+39%
Small General Service	0.402	0.433	0.620	+43%
Medium General Service	0.261	0.277	0.324	+17%
Large General Service	0.116	0.127	0.145	+14%

The Company's requested rates would increase the bill of an average residential customer using 1,000 kWh per month by approximately \$0.86 cents.

Conclusion and Recommendations

ORS is concerned that since PY4, the Company's actual energy savings have fallen well short of the Company's energy savings projections. The Commission, in Order No. 2021-295, required the Company to revisit the methodology employed to generate the projected Programs' savings to ensure better alignment with the Company's future actual realized savings. The Company reported it has started to address the issue of the shortfall in savings projections and is currently working with third-party evaluator, Opinion Dynamics Corporation ("ODC") to complete a market assessment that will provide reliable data updates to be used in the DSM Potential Study, currently underway and to be completed in 2023.

ORS hopes the updated data from ODC's market assessment, together with the DSM Potential Study, will lead to more reliable information that will assist the Company to better align their savings projections with actual realized savings.

ORS is also concerned that the Home Energy Check-Up program failed to be cost effective in PY8, 9, and 10, and is projected to fail the cost-effectiveness test for PY11 as well. The Company reported starting additional activities, including increasing the number of installed LED bulbs from five (5) bulbs to an unlimited number of incandescent bulb replacements and providing new direct install measures (LED outdoor lighting, smart power strips, shower timers) to be included

with the existing measures offered to address the decline in cost-effectiveness of the program, but because of COVID restrictions, improvement to the cost-effectiveness has not yet been realized. ORS commends the Company on the actions taken to attempt to improve the cost-effectiveness of the program and will use the results of PY12 to make a recommendation on whether to keep the program active or terminate the program for failure to achieve cost-effectiveness.

ORS finds the updated DSM Rate Rider to be developed in accordance with the terms and conditions set forth in Commission Order Nos. 2010-472, 2013-826, and 2019-880.

DESC Revenue Request for Demand Side Management Programs
For the Recovery Period of May 2022 - April 2023

	<u>Residential</u>	<u>Small General Service</u>	<u>Medium General Service</u>	<u>Large General Service</u>	<u>Total</u>
<u>Program Costs:</u>					
Vintages PY1-PY9 Balance as of April 30, 2022	\$12,652,550	\$7,174,219	\$3,503,064	\$3,447,976	\$26,777,809
One Year Amortization (over remaining one year)	\$12,652,550	\$7,174,219	\$3,503,064	\$3,447,976	\$26,777,809
Vintage PY10 Balance as of April 30 2022	\$5,088,370	\$4,187,378	\$900,943	\$650,171	\$10,826,862
One Year Amortization (over remaining two years)	\$2,544,185	\$2,093,689	\$450,472	\$325,086	\$5,413,432
Vintage PY11 Balance as of April 30 2022	\$10,591,460	\$8,653,289	\$1,129,063	\$929,816	\$21,303,628
One Year Amortization (over three years)	\$3,530,487	\$2,884,430	\$376,354	\$309,939	\$7,101,210
Total Amortization of Program Costs for Rate Calculation	\$18,727,222	\$12,152,338	\$4,329,890	\$4,083,001	\$39,292,451

Net Lost Revenues for December 1, 2019 through November 30, 2022:

Cumulative Energy Savings (KWh)	78,899,105	111,809,412	27,210,528	24,171,765	242,090,810
Net Lost Revenue Factors (\$/KWh)	\$0.09687	\$0.08867	\$0.06635	\$0.03969	
Estimated Net Lost Revenues	\$7,642,956	\$9,914,141	\$1,805,419	\$959,377	\$20,321,893
True-up for PY10	(\$1,421,778)	(\$217,619)	(\$427,062)	(\$307,809)	(\$2,374,268)
Net Lost Revenues for Rate Calculation	\$6,221,178	\$9,696,522	\$1,378,357	\$651,568	\$17,947,625

Shared Savings Incentive:

Cumulative Shared Savings Amortization though PY12	\$771,537	\$1,143,092	\$298,540	\$223,775	\$2,436,944
True-up for PY10	(\$5,810)	\$169,357	\$64,576	\$13,588	\$241,711
Shared Savings Amortization for Rate Calculation	\$765,727	\$1,312,449	\$363,116	\$237,363	\$2,678,655

DSM Rate Rider

Amortization of Program Costs	\$18,727,222	\$12,152,338	\$4,329,890	\$4,083,001	\$39,292,451
Net Lost Revenues	\$6,221,178	\$9,696,522	\$1,378,357	\$651,568	\$17,947,625
Amortization of Shared Savings Incentive	\$765,727	\$1,312,449	\$363,116	\$237,363	\$2,678,655
Total Requested Recovery	\$25,714,127	\$23,161,309	\$6,071,363	\$4,971,932	\$59,918,731
Projected Sales (GWh)	8,375.1	3,733.0	1,874.4	3,426.5	
DSM Rate Rider (¢/KWh)	0.307	0.620	0.324	0.145	